

Replacement Abstract

ABSTRACT

~~Raman fiber lasers and systems including Raman fiber lasers are~~
disclosed. Fiber laser systems. One system comprises a pump energy source, a
first fiber and a WDM for transferring pump energy from the first fiber to a
second fiber that comprises a grating for reflecting energy at a predetermined
wavelength. The first fiber is devoid of a grating substantially reflecting energy
of the predetermined wavelength. In another embodiment, a system includes a
pump energy source and a fiber comprising a loop-shaped portion, a first non
loop-shaped portion comprising a grating for reflecting pump energy, and a
second non loop-shaped portion comprising a grating for reflecting a Stoke
shifted wavelength. In another embodiment, a system includes a pump energy
source and a fiber comprising a first pair of gratings for reflecting energy at a
first wavelength corresponding to a first order Stoke shift, a second pair of
gratings for reflecting energy at a second wavelength corresponding to a Stoke
shift order greater than one, and a third pair of gratings for reflecting energy
having a Stoke shift order greater than that of the second wavelength. No grating
of the third pair is located between gratings of the second pair.